What is claimed is:

1. A process for producing a protein powder which comprises contacting a protein-containing solution with a refrigerant carrier, freezing the solution at a cooling rate of about -300 to -10°C/min. and then drying.

2. The process according to claim 1, wherein the protein-containing solution is applied or dropped to the refrigerant carrier.

3. The process according to claim 2, wherein a dropping fluid of about 0.1 to 40 mm diameter is applied or dropped.

4. The process according to claim 1, wherein freezing is carried out by preventing the protein-containing solution from direct contact with a liquid refrigerant.

5. The process according to claim 1, wherein a volatile salt or water-miscible organic solvent is added to the protein-containing solution.

6. The process according to claim 5, wherein the volatile salt is ammonium acetate.

7. A protein powder obtainable by the process according to claim 1.

8. The protein powder according to claim 7, wherein the protein has a molecular weight of about 5,000 to 1,000,000 dalton.

9. The protein powder according to claim 7, wherein the protein is selected from hormones, cytokines, hematopoietic factors, growth factors and enzymes.

10. The protein powder according to claim 7, wherein the protein is a growth hormone or insulin.

11. The protein powder according to claim 7, wherein the protein retains 45% or more of α-helix based on the total α-helix content in the protein-containing solution.

12. A process for producing a finely divided protein powder which comprising atomizing the protein powder according to claim 7.

13. The process according to claim 12, wherein the atomization is carried out so that a finely divided protein powder having an average particle size of about 0.5 to 20 μm is obtained.

14. A sustained-release preparation which comprises the finely divided protein powder obtained by the process according to claim ~~12~~.

15. The sustained-release preparation according to claim 14, wherein the base material of the sustained-release preparation is a material derived from a living body or a synthetic polymer.

16. The sustained-release preparation according to claim 15, wherein the material derived from a living body or a synthetic polymer is a biodegradable polymer.

17. A sustained-release preparation which comprises lactic acid/glycolic acid copolymer having the molar ratio of the lactic acid/glycolic acid of 60/40 to 70/30 and a growth hormone.

18. A process for producing a sustained-release preparation which comprises using the finely divided protein powder obtained by the process according to claim 12.

19. Use of the finely divided protein powder according to claim 7 for manufacturing a sustained-release preparation.